## § 17.58

#### §17.58 Facilities to be located on land under the jurisdiction of the U.S. Forest Service or the Bureau of Land Management.

Any application proposing new or modified transmitting facilities to be located on land under the jurisdiction of the U.S. Forest Service or the Bureau of Land Management shall include a statement that the facilities will be so located, and the applicant shall comply with the requirements of §1.70 of this chapter.

[32 FR 11274, Aug. 3, 1967]

# PART 18—INDUSTRIAL, SCIENTIFIC, AND MEDICAL EQUIPMENT

### Subpart A—General Information

Sec. 18.101 Basis and purpose. 18.107 Definitions.

18.109 General technical requirements.

18.111 General operating conditions.

18.113 Inspection by Commission represent-

18.115 Elimination and investigation of harmful interference.

18.117 Report of interference investigation.

18.121 Exemptions.

# Subpart B—Applications and Authorizations

18.201 Scope.

18.203 Equipment authorization.

18.207 Technical report.

18.209 Identification of authorized equipment.

18.211 Multiple listing of equipment.

18.212 Compliance information.

18.213 Information to the user.

#### Subpart C—Technical Standards

18.301 Operating frequencies.

18.303 Prohibited frequency bands.

18.305 Field strength limits.18.307 Conduction limits.

18.309 Frequency range of measurements.

18.311 Methods of measurements.

AUTHORITY: 47 U.S.C. 4, 301, 302, 303, 304, 307,

SOURCE: 50 FR 36067, Sept. 5, 1985, unless otherwise noted.

## Subpart A—General Information

# §18.101 Basis and purpose.

The rules in this part, in accordance with the applicable treaties and agreements to which the United States is a

party, are promulgated pursuant to section 302 of the Communications Act of 1934, as amended, vesting the Federal Communications Commission with authority to regulate industrial, scientific, and medical equipment (ISM) that emits electromagnetic energy on frequencies within the radio frequency spectrum in order to prevent harmful interference to authorized radio communication services. This part sets forth the conditions under which the equipment in question may be operated.

#### §18.107 Definitions.

- (a) Radio frequency (RF) energy. Electromagnetic energy at any frequency in the radio spectrum from 9 kHz to 3 THz (3.000 GHz).
- (b) Harmful interference. Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with this chapter.
- (c) Industrial, scientific, and medical (ISM) equipment. Equipment or appliances designed to generate and use locally RF energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunication. Typical ISM applications are the production of physical, biological, or chemical effects such as heating, ionization of gases, mechanical vibrations, hair removal and acceleration of charged particles.
- (d) Industrial heating equipment. A category of ISM equipment used for or in connection with industrial heating operations utilized in a manufacturing or production process.
- (e) Medical diathermy equipment. A category of ISM equipment used for therapeutic purposes, not including surgical diathermy apparatus designed for intermittent operation with low power.
- (f) Ultrasonic equipment. A category of ISM equipment in which the RF energy is used to excite or drive an electromechanical transducer for the production of sonic or ultrasonic mechanical energy for industrial, scientific, medical or other noncommunication purposes.